RAW SEQUENCE LISTING DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:43:47

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05262000\H908867B.raw

```
   4 (1) GENERAL INFORMATION:
   7      (i) APPLICANT: YOUNG, ANDREW A.
   8                     GEDULIN, BRONISLAVA
   9                     BEELEY, NIGEL ROBERT ARNOLD
  10                     PRICKETT, KATHRYN S.
  13     (ii) TITLE OF INVENTION: METHODS FOR REGULATING
  14                              GASTROINTESTINAL MOTIITY
  17    (iii) NUMBER OF SEQUENCES: 39
  20     (iv) CORRESPONDENCE ADDRESS:
  22           (A) ADDRESSEE: LYON & LYON
  23           (B) STREET: 633 WEST FIFTH STREET
  24           (C) CITY: LOS ANGELES
  25           (D) STATE: CALIFORNIA
  26           (E) COUNTRY: USA
  27           (F) ZIP: 90017
  30      (v) COMPUTER READABLE FORM:
  32           (A) MEDIUM TYPE: Floppy disk
  33           (B) COMPUTER: IBM PC compatible
  34           (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  35           (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
C--> 38     (vi) CURRENT APPLICATION DATA:
C--> 40           (A) APPLICATION NUMBER: US/08/908,867B
C--> 41           (B) FILING DATE: 08-Aug-1997
  49           (C) CLASSIFICATION: Pending
  45    (vii) PRIOR APPLICATION DATA:
  47           (A) APPLICATION NUMBER: 08/694,954
  48           (B) FILING DATE: 08-AUGUST-1996
  54   (viii) ATTORNEY/AGENT INFORMATION:
  56           (A) NAME: BERKMAN, CHARLES S.
  57           (B) REGISTRATION NUMBER: 38,077
  58           (C) REFERENCE/DOCKET NUMBER: 227/166
  61     (ix) TELECOMMUNICATION INFORMATION:
  63           (A) TELEPHONE: 619/552-2200
  64           (B) TELEFAX: 213/955-0440
  65           (C) TELEX: 67-3510
  69 (2) INFORMATION FOR SEQ ID NO: 1:
  71      (i) SEQUENCE CHARACTERISTICS:
  73           (A) LENGTH: 39 amino acids
  74           (B) TYPE: amino acid
  75           (C) STRANDEDNESS: single
  76           (D) TOPOLOGY: linear
  78     (ii) MOLECULE TYPE: peptide
  80     (ix) FEATURE:
  82           (B) LOCATION: 39
  83           (D) OTHER INFORMATION: amidated Ser (Serineamide)
  85     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
  87 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
```

RAW SEQUENCE LISTING DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:43:47

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05262000\H908867B.raw

```
88 1               5                  10                  15
90 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
91             20                  25                  30
93 Ser Gly Ala Pro Pro Pro Ser
94         35
98 (2) INFORMATION FOR SEQ ID NO: 2:
100      (i) SEQUENCE CHARACTERISTICS:
102           (A) LENGTH: 39 amino acids
103           (B) TYPE: amino acid
104           (C) STRANDEDNESS: single
105           (D) TOPOLOGY: linear
107     (ii) MOLECULE TYPE: peptide
109     (ix) FEATURE:
111           (B) LOCATION: 39
112           (D) OTHER INFORMATION: amidated Ser (Serineamide)
114     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
116 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
117 1               5                  10                  15
119 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
120             20                  25                  30
121 Ser Gly Ala Pro Pro Pro Ser
122         35
126 (2) INFORMATION FOR SEQ ID NO: 3:
128      (i) SEQUENCE CHARACTERISTICS:
130           (A) LENGTH: 30 amino acids
131           (B) TYPE: amino acid
132           (C) STRANDEDNESS: single
133           (D) TOPOLOGY: linear
135     (ii) MOLECULE TYPE: peptide
137     (ix) FEATURE:
139           (B) LOCATION: 30
140           (D) OTHER INFORMATION: amidated Arg (Arginineamide)
142     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
144 His Ala Glu Gly Thr Phe Thr Ser Asp Val Ser Ser Tyr Leu Glu Gly
145 1               5                  10                  15
147 Gln Ala Ala Lys Glu Phe Ile Ala Trp Leu Val Lys Gly Arg
148             20                  25                  30
152 (2) INFORMATION FOR SEQ ID NO: 4:
154      (i) SEQUENCE CHARACTERISTICS:
156           (A) LENGTH: 31 amino acids
157           (B) TYPE: amino acid
158           (C) STRANDEDNESS: single
159           (D) TOPOLOGY: linear
161     (ii) MOLECULE TYPE: peptide
163     (ix) FEATURE:
165           (B) LOCATION: 31
166           (D) OTHER INFORMATION: amidated Ser (Serineamide)
168     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
170 Asp Leu Ser Lys Gly Met Glu Glu Glu Ala Val Arg Leu Phe Ile Glu
```

RAW SEQUENCE LISTING DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:43:47

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05262000\H908867B.raw

```
171 1               5                   10                  15
173 Trp Leu Lys Asn Gly Gly Pro Ser Ser Gly Ala Pro Pro Pro Ser
174             20                  25                  30
178 (2) INFORMATION FOR SEQ ID NO: 5:
180      (i) SEQUENCE CHARACTERISTICS:
182           (A) LENGTH: 39 amino acids
183           (B) TYPE: amino acid
184           (C) STRANDEDNESS: single
185           (D) TOPOLOGY: linear
187     (ii) MOLECULE TYPE: peptide
189     (ix) FEATURE:
191           (B) LOCATION: 39
192           (D) OTHER INFORMATION: amidated Ser (Serineamide)
194     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
196 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
197 1               5                   10                  15
199 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
200             20                  25                  30
202 Ser Gly Ala Pro Pro Pro Ser
203         35
207 (2) INFORMATION FOR SEQ ID NO: 6:
213      (i) SEQUENCE CHARACTERISTICS:
215           (A) LENGTH: 39 amino acids
216           (B) TYPE: amino acid
217           (C) STRANDEDNESS: single
218           (D) TOPOLOGY: linear
220     (ii) MOLECULE TYPE: peptide
222     (ix) FEATURE:
224           (B) LOCATION: 39
225           (D) OTHER INFORMATION: amidated Ser (Serineamide)
227     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
229 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
230 1               5                   10                  15
232 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
233             20                  25                  30
235 Ser Gly Ala Pro Pro Pro Ser
236         35
240 (2) INFORMATION FOR SEQ ID NO: 7:
242      (i) SEQUENCE CHARACTERISTICS:
244           (A) LENGTH: 39 amino acids
245           (B) TYPE: amino acid
246           (C) STRANDEDNESS: single
247           (D) TOPOLOGY: linear
254     (ii) MOLECULE TYPE: peptide
249     (ix) FEATURE:
251           (B) LOCATION: 39
252           (D) OTHER INFORMATION: amidated Ser (Serineamide)
256     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
258 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
```

RAW SEQUENCE LISTING DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:43:47

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05262000\H908867B.raw

```
259 1               5                   10                  15
261 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser
262             20                  25                  30
264 Ser Gly Ala Pro Pro Pro Ser
265         35
267 (2) INFORMATION FOR SEQ ID NO: 8:
269      (i) SEQUENCE CHARACTERISTICS:
271           (A) LENGTH: 39 amino acids
272           (B) TYPE: amino acid
273           (C) STRANDEDNESS: single
274           (D) TOPOLOGY: linear
276     (ii) MOLECULE TYPE: peptide
278     (ix) FEATURE:
280           (B) LOCATION: 39
281           (D) OTHER INFORMATION: amidated Ser (Serineamide)
283     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
285 Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
286 1               5                   10                  15
288 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
289             20                  25                  30
291 Ser Gly Ala Pro Pro Pro Ser
292         35
296 (2) INFORMATION FOR SEQ ID NO: 9:
298      (i) SEQUENCE CHARACTERISTICS:
300           (A) LENGTH: 39 amino acids
301           (B) TYPE: amino acid
302           (C) STRANDEDNESS: single
303           (D) TOPOLOGY: linear
305     (ii) MOLECULE TYPE: peptide
307     (ix) FEATURE:
309           (B) LOCATION: 39
310           (D) OTHER INFORMATION: amidated Tyr (Tyrosinamide)
312     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
314 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
315 1               5                   10                  15
317 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
318             20                  25                  30
320 Ser Gly Ala Pro Pro Pro Tyr
321         35
325 (2) INFORMATION FOR SEQ ID NO: 10:
327      (i) SEQUENCE CHARACTERISTICS:
329           (A) LENGTH: 39 amino acids
330           (B) TYPE: amino acid
331           (C) STRANDEDNESS: single
332           (D) TOPOLOGY: linear
334     (ii) MOLECULE TYPE: peptide
336     (ix) FEATURE:
338           (B) LOCATION: 39
339           (D) OTHER INFORMATION: amidated Ser (Serineamide)
```

RAW SEQUENCE LISTING DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:43:47

Input Set : A:\Pto.amc
Output Set: N:\CRF3\05262000\H908867B.raw

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
His Gly Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Pro Pro Pro Ser
35

(2) INFORMATION FOR SEQ ID NO: 11:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 39 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(B) LOCATION: 39
(D) OTHER INFORMATION: amidated Ser (Serineamide)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
His Gly Glu Gly Thr Ala Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Pro Pro Pro Ser
35

(2) INFORMATION FOR SEQ ID NO: 12:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 39 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:
(B) LOCATION: 39
(D) OTHER INFORMATION: amidated Ser (Serineamide)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
His Gly Glu Gly Thr Phe Ser Ser Asp Leu Ser Lys Gln Met Glu Glu
1 5 10 15
Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
20 25 30
Ser Gly Ala Pro Pro Pro Ser
35

(2) INFORMATION FOR SEQ ID NO: 13:
(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 39 amino acids
(B) TYPE: amino acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: peptide
(ix) FEATURE:

Follow

1642

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 08/908,867B ENTERED

P#20

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:

  _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

  _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

  _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

  _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included:

  _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically:

  _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically:

  _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically:

  _____

RECEIVED
JUN - 9 2000
TC 1600 MAIL ROOM

- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ***ending*** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☑ Other: Seq 35 - aligned a.a. numbering

  _____

  _____

  _____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:41:48

Input Set : A:\227166.txt
Output Set: N:\CRF3\05262000\H908867B.raw

Does Not Comply
Corrected Diskette Needed

```
   4 (1) GENERAL INFORMATION:
   7      (i) APPLICANT: YOUNG, ANDREW A.
   8                     GEDULIN, BRONISLAVA
   9                     BEELEY, NIGEL ROBERT ARNOLD
  10                     PRICKETT, KATHRYN S.
  13     (ii) TITLE OF INVENTION: METHODS FOR REGULATING
  14                              GASTROINTESTINAL MOTIITY
  17    (iii) NUMBER OF SEQUENCES: 39
  20     (iv) CORRESPONDENCE ADDRESS:
  22           (A) ADDRESSEE: LYON & LYON
  23           (B) STREET: 633 WEST FIFTH STREET
  24           (C) CITY: LOS ANGELES
  25           (D) STATE: CALIFORNIA
  26           (E) COUNTRY: USA
  27           (F) ZIP: 90017
  30      (v) COMPUTER READABLE FORM:
  32           (A) MEDIUM TYPE: Floppy disk
  33           (B) COMPUTER: IBM PC compatible
  34           (C) OPERATING SYSTEM: PC-DOS/MS-DOS
  35           (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
C--> 38     (vi) CURRENT APPLICATION DATA:
C--> 40           (A) APPLICATION NUMBER: US/08/908,867B
C--> 41           (B) FILING DATE: 08-Aug-1997
  49           (C) CLASSIFICATION: Pending
  45    (vii) PRIOR APPLICATION DATA:
  47           (A) APPLICATION NUMBER: 08/694,954
  48           (B) FILING DATE: 08-AUGUST-1996
  54   (viii) ATTORNEY/AGENT INFORMATION:
  56           (A) NAME: BERKMAN, CHARLES S.
  57           (B) REGISTRATION NUMBER: 38,077
  58           (C) REFERENCE/DOCKET NUMBER: 227/166
  61     (ix) TELECOMMUNICATION INFORMATION:
  63           (A) TELEPHONE: 619/552-2200
  64           (B) TELEFAX: 213/955-0440
  65           (C) TELEX: 67-3510
```

ERRORED SEQUENCES

```
1106 (2) INFORMATION FOR SEQ ID NO: 35
1108      (i) SEQUENCE CHARACTERISTICS:
1110           (A) LENGTH: 39 amino acids
1111           (B) TYPE: amino acid
1112           (C) STRANDEDNESS: single
1113           (D) TOPOLOGY: linear
1115     (ii) MOLECULE TYPE: peptide
1117     (ix) FEATURE:
```

RAW SEQUENCE LISTING DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:41:48

Input Set : A:\227166.txt
Output Set: N:\CRF3\05262000\H908867B.raw

1122 (B) LOCATION: 39
1123 (D) OTHER INFORMATION: amidated Ser (Serineamide)
1125 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 35:
1127 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu
1128 1 5 10 15
1130 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Ala Ser
E--> 1131 20 25 ~~30~~ 30
1133 Ser Gly Ala Ala Ala Ala Ser
1134 35

VERIFICATION SUMMARY DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:41:49

Input Set : A:\227166.txt
Output Set: N:\CRF3\05262000\H908867B.raw

L:1131 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:35
L:1229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:1232 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:1235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:1282 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:1285 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39
L:1288 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39

STATISTICS SUMMARY DATE: 05/30/2000
PATENT APPLICATION: US/08/908,867B TIME: 18:41:49

Input Set : A:\227166.txt
Output Set: N:\CRF3\05262000\H908867B.raw

Application Serial Number: US/08/908,867
Alpha or Numeric: Alpha
Application Class:
Application File Date: 08-08-1997
Art Unit:
Software Application: PatentIn
Total Number of Sequences: 39
Number of Errors: 1
Number of Warnings: 6
Number of Corrections: 0

MESSAGE SUMMARY

332 E: 1 ((32) Invalid/Missing Amino Acid Numbering)
341 W: 6 ((46) "n" or "Xaa" used)